

Science Finds Life Growing Harder for the People On Mars

Newest Weather Conditions on the Dying Planet That Seem to Show the Martians Must Soon Find Means to Move to Some Better World or Be Wiped Out of Existence

How the Telescopes on Earth Showed the Firing of the Projectiles in Which the First Invaders from Mars Were Shot Out Into Space.

By Dr. W. H. Ballou.

THE reports of the leading astronomers show that the conditions of life on the planet Mars at the present moment are becoming increasingly hard and that if the planet is inhabited, as appears probable, its people must now be seeking some way of escape from their miseries.

We are therefore confronted by the possibility that has often been discussed by imaginative scientists and others—a descent upon the earth by the inhabitants of Mars. Professor Lowell, Professor Pickering, Camille Flammarion and other scientists, as well as H. G. Wells, have pointed out that if the means of life were failing on any planet it was logical to expect the inhabitants would try to move to some other planet. The only question is how they would move, and Mr. Wells may have solved that problem.

Mars at the present moment offers unusual opportunities for observation to the astronomer, as it is nearer to the earth than it has been for many years. It is now only 42,350,000 miles away, whereas at this time last year it was 200,000,000 miles away.

Two years from now Mars will be only 34,900,000 miles away. If they cannot attack us this year, the Martians, having suffered unbearable miseries, will, perhaps, have perfected their arrangements in the two-year period and may then descend upon the earth in devastating myriads.

Summer on Mars has now passed, and even ordinary telescopes show that the ice and snow cap around the poles of Mars have spread further than ever, adding to the hardships of life on an ordinarily cold and arid planet.

There is ample scientific evidence for conjecturing that life on Mars has now become a long agony which no earthly creature could endure, and which even the Martians, who have undergone ages of adaptation, are finding unbearable.

Incessantly swept by terrible dust-storms, unable to find sufficient nourishment on an arid, frozen globe, gasping for breath in an exhausted atmosphere, unable to find even water, the Martians are living in an inferno that only the pen of a Dante could describe.

All the evidence indicates that the Martians must soon make a wholesale migration to the earth or some other favorable planet in the manner that imaginative writers have suggested. Unless they do so, they are faced with speedy annihilation.

This tragic situation lends great interest to the new illustrations made by a brilliant European artist, Alvin Correa, for a French edition of H. G. Wells' "War of the Worlds." It will be remembered that in this famous work the Martians, being threatened with extinction, began shooting themselves to the earth in vast numbers.

They were all brain and no bones and shaped much like giant octopuses. To compensate for the lack of skeleton, their bodies were enclosed in circular metal cases and moved on enormous metal stilts. They nourished themselves on Mars by transfusing blood from the bodies of man-like creatures. When they reached earth they used men for food purposes and were rapidly destroying the helpless population. They rapidly conquered London and other important regions.

But on Mars the Martians had lived entirely without disease germs and consequently possessed no acquired immunity to them. With the blood of human beings they drew in the germs of death and rapidly succumbed without a struggle.

They had command of a burning ray, which instantly shrivelled up any object which it touched. When the Martian invaders needed food they picked up human beings in their long tentacles, transferred their blood to themselves and threw their empty carcasses away.

Martian Beginning to Eject Deadly Black Poison Gas Upon the Earth.

Are we now destined in reality to face a devastating army of hunger-driven Martians and to pass through a struggle more terrible than the world war? Perhaps we should find the real Martians not so easily destroyed by germs as Wells imagined. On the other hand, we could probably use poison gas against them as deadly as any they can bring.

What other lessons has the world war taught us that would help to repel the Martian monsters? A brilliant artillerist, who served with a Chicago battery in the world war, said:

"Creatures in metal cases such as Wells describes would stand no chance against a sufficient supply of 75-millimetre guns. These guns fire 36 shells to the minute and can be aimed to hit a man five miles away. Each shell will destroy a stone building. It can be fitted with an armor-piercing fuse. It is only fair to say that no such weapon was in existence when Wells wrote his book.

"As recently as the Boer war, which happened after Wells wrote his book, artillery was practically useless against trenches or moving objects. In other words, it was only effective against built up objects that offered a permanent target.

"All that is changed now. The French 75 millimetre shell finds its way into trenches and all kinds of recesses. It is certain to hit tanks, armored cars and other moving objects.

A Martian Invader Wounded by a Human Projectile.

"Progressive military men are the first to admit that Wells pointed the way to tremendously improved methods of war. We are now working on the production of poison gases of enormously increased power and a burning ray similar to that with which he equipped the Martians."

The official observers of the Lowell Observatory at Flagstaff, Arizona, Drs. E. C. and V. M. Slipher, report that late in June a white canopy extending far beyond the polar regions had appeared, covering an area somewhat larger than Manitoba province in Canada—that is, 250,000 square miles—and in about the same latitude. They hold that there must have been a stupendous snowstorm, one of the first of the Martian autumn, and that it must have brought untold hardships to the Martians.

The observers at the Lowell Observatory have been able to see what was invisible elsewhere, on account of the extremely dry atmosphere in Arizona. They

"A vast, grayish, round mass, about the size of a bear, rose slowly and laboriously out of the metal cylinder. When it came into the full light it shone like wet leather. Its two great dark eyes regarded me fixedly."

Pictures from Correa's Remarkable Illustrations of Wells's "War of the Worlds."

Martian Conqueror Picking Up Human Beings With Its Octopus-Like Tentacles to Devour Their Blood.

are convinced that the Martian atmosphere is very rarefied, as compared with that of the earth. The amount of water vapor there is so small that for many years its existence was rather guessed at than proved. It is so scanty that no clouds can form thick enough to be visible to our telescopes in most earthly countries, but in the clear air of Arizona the Doctors Slipher have repeatedly observed a kind of mist differing quite noticeably from the fierce dust storms that prevail upon Mars from time to time.

Thus the latest observations tend to support the scientific hypothesis of Professor Lowell that there is an atmosphere of sufficient density to support the life of beings resembling human creatures.

The Martian Invaders in Their Walking Machines With Artificial Eyes Using the "Heat Rays" That Instantly Destroyed Everything They Touched.

Professor Lowell stated that Mars is level and monotonous, with no mountains and only a few dried-up beds of shallow seas to diversify its topography. More than one-half of Mars is a dreary desert, and the rest is green only when the canals are bringing water from the Polar ice caps. He first described the great dust storms which sweep over its equatorial section, blotting out hundreds of square miles of the planet's surface from our view.

The physical conditions on Mars are very different from those we have on earth. The force of gravity exerted on Mars is only three-eighths of that on the earth, while the atmospheric pressure that is about fifteen pounds to the square inch at sea level on earth is less than four pounds on Mars. This would make it possible for enormous weights to be lifted on Mars with little muscular effort, as compared with the tasks on our planet.

Lowell figured that Martians could do seven times more work than human beings on earth with the same amount of effort. An elephant could leap like a gazelle there, and a stone thrown into the air would go very high and sink with a slow, graceful motion, much like the apparent action of a slowed-up movie camera.

The supposed signals from Mars, which Marconi believed he had received on his yacht Electra this summer, may well have something to do with distress on that

Martian Warriors Carrying Away a Wounded Companion.

planet, although a different explanation of them has been furnished.

It is commonly assumed that the Martian, if he exists at all, has a much older civilization than our own. The basis for this assumption is the nebular hypothesis, according to which the various planets were thrown off in succession from the mass of world-stuff which contracted as it cooled, with the sun at its centre. On this thesis the outer planets would obviously be older and Mars would presumably have been far ahead of us in developing a living population.

We might fairly expect our elder planetary brother to take the initiative in sending signals to the earth. Radio, which is new with us, may be an old, old story with the Martians. Quite possibly they have been patiently waiting thousands of years for us to become intelligent enough to answer their signals.

If the Martian exists, and if he has a radio system that can reach the earth, he should have no difficulty in revealing himself to us. Nothing more would be necessary than to send a series of signals at fixed intervals. If, for example, he were to make two signals, then after an interval two more, and after a double interval, four signals, we should know that he was proving that he could add two and two.